

ABSTRACT

A module for optical communication intended for decreasing the consumption power of a modulator integrated laser, in which a, multiple-quantum well constituting a laser active layer region comprises InGaAlAs/InGaNAs to keep the reliability and optical power level even when a chip is kept at a high temperature, and the difference of wavelength between the oscillation wavelength and the band gap wavelength of the modulator and the laser should be made greater in proportion with the elevation of the chip setting temperature for maintaining the transmission performance, by which the temperature difference between the module case temperature and the chip setting temperature is reduced to decrease the module consumption power.